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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ronald E. Larson McAndrews, Held & Malloy, Ltd. 34th Floor 500 W. Madison Street Chicago, IL 60661			EXAMINER MCCULLOCH JR, WILLIAM H	
			ART UNIT 3714	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/981,459

**Applicant(s)**

D'AMICO ET AL.

**Examiner**

William H. McCulloch

**Art Unit**

3714

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 21, 23 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 21, 23 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SD/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/15/2010 has been entered. Claims 1-3, 5, 21, 23, and 34 are pending in the application, with claims 1, 21, and 34 currently amended.

### ***Claim Interpretations***

2. The claims have been amended to include the recitation that obtained data is "not in a format useable by the accounting module software." This feature is not *explicitly* described in the specification.

Applicant has pointed to various portions of the specification (see Remarks, p. 9) that allegedly support this feature, most pertinent of which is paragraph 46. Paragraph 46 states that "transaction data stored in games 100-106 is formatted in a format unacceptable to the gaming audit report generating software" and the "poller formats the transaction data into the audit format acceptable to the gaming audit report generating software."

MPEP 2111 states that USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Furthermore, the

proscription against the introduction of new matter in a patent application (35 U.S.C. 132 and 251) serves to prevent an applicant from adding information that goes beyond the subject matter originally filed. See *In re Rasmussen*, 650 F.2d 1212, 1214, 211 USPQ 323, 326 (CCPA 1981). The subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement. If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. See MPEP 2163.02.

It must be expressly understood that for purposes of this action, the Examiner will interpret the term *useable* (in the claims) to be synonymous with *acceptable* (in the specification), and the term *not useable* to be synonymous with *unacceptable*. Should Applicant object to this interpretation, the issue will likely be raised under 35 U.S.C. 112, first paragraph. Though it is not required, Applicant may wish to consider amending the claims to use the same terminology as the specification in order to ameliorate potential rejections under 35 U.S.C. 112, first paragraph.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 21, 23, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,766,076 to Pease et al. (hereinafter Pease) in view of U.S. 6,682,421 to Rowe et al. (hereinafter Rowe), "What are relational databases?", and "TCP/IP for Dummies."

Regarding claims 1, 21, and 34, Pease teaches a gaming system comprising a central authority (central computer system 106) and a plurality of gaming machines (e.g. gaming devices 108a-108c), wherein the gaming machines are configured to receive balance data (e.g., player tracking card account balance; see at least 3:61-4:9), and wherein the gaming machines are configured to generate meter data, jackpot data, and player data (see at least 3:37-4:9 and 5:47-60), apparatus for providing data storage and communications between the gaming machines and the central authority comprising:

- A first database located in the central authority, wherein the first relational database comprises a meter table, a jackpot table, a player table and a balance table (see at least 3:37-4:9 and 5:47-60);
- Accounting module software (7:53-59 and 9:18-34);
- A network (see at least Fig. 1); and
- A data processing unit (e.g., gateway processor 138) spaced apart from the first database and comprising:
  - A second relational database comprising a local meter table, a local jackpot table, a local ticket table, a local player table and a local balance table (e.g., data stored in the gateway processor 138; the term "table" is

interpreted as a collection of data); and a programmed hardware (the gateway processor) configured to provide a poller function and a data mover function, wherein:

- 1) The poller function is configured to poll each of the gaming machines to obtain meter data, jackpot data, and player data generated by the gaming machines over the network (e.g., the use of polling as described in at least 3:37-4:9 and 6:12-23), the poller function being further arranged to format, without human intervention, the obtained data in a format usable by the accounting module software before storing the formatted data in a corresponding local meter table, local jackpot table, and local player table (in the case of Pease, the data stored is at one point in time in a format usable by accounting module software according to 7:53-59 and 9:18-34),
- 2) The data mover function is configured to periodically transmit at least a portion of the formatted meter data, formatted jackpot data, and formatted player data from the second relational database to the first relational database over the network (e.g., data sent between the gateway processor 138 and the central computer system 108), whereby the periodically transmitted meter data is stored in the meter table, the periodically transmitted jackpot data is stored in the jackpot table, the periodically transmitted output ticket

data is stored in the ticket table, and the periodically transmitted player data is stored in the player table,

- 3) The data mover function is further configured to periodically retrieve input balance data from the first database over the network independently of a request by any of the gaming machines, whereby the periodically retrieved balance data is stored in the local balance table (because Pease teaches polling as a means for data transfer, information is transmitted on a periodic basis regardless of any request), and
  - 4) The poller function is further configured to transmit at least a portion of the periodically retrieved balance data from the second database to the gaming machines over the network when said portion is required by the gaming machines (e.g., by sending balance information for the player tracking system);
- An accounting module being arranged to evaluate the formatted and periodically transmitted data stored in at least one of the tables of the first relational database to automatically generate a gaming activity audit report for the plurality of gaming machines (e.g., the central computer system 108; see 7:53-59 and 9:18-34 for audit information).

Pease teaches the invention substantially as described above. Pease additionally teaches that player tracking systems are known in the art and may include a card bearing encoded information, wherein the card is purchase by a player and may be

linked to an existing account (see at least 3:37-4:9). Pease lacks in explicitly teaching that a ticket is generated at a gaming machine. In a related disclosure, Rowe teaches that as technology in the gaming industry progressed, "the traditional method of dispensing coins or tokens as awards for winning game outcomes [became] supplemented by ticket dispensers which print ticket vouchers that may be exchanged for cash or accepted as credit of indicia in other gaming machines for additional game play. An award ticket system, which allows award ticket vouchers to be dispensed and utilized by other gaming machines, increases the operational efficiency of maintaining a gaming machine and simplifies the player pay out process. An example of an award ticket system is the EZ pay ticket system by International Game Technology of Las Vegas, Nev." See col. 1, lines 36-47. Rowe further teaches, "An important component of an award ticket system is the ticket validation process. Typically, a game player's satisfaction with an award ticket system is based upon the ease by which the ticket vouchers may be validated or utilized within the context of game playing. When the ticket validation process is difficult, a game player may become dissatisfied with the game playing area offering the award ticket system and frequent a game playing area without an award ticket system or a game playing area offering a simpler ticket validation process." See col. 1, lines 56-65. Finally, Rowe teaches that all of the gaming machines print ticket vouchers, which may be exchanged for cash or accepted as credit of indicia in other gaming machines (2:5-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system taught by Pease to generate tickets at the gaming machine as taught by Rowe in order



to provide increased operational efficiency of maintaining a gaming machine and simplify the player pay out process, thereby increasing player satisfaction as taught by Rowe.

The combined teachings of Pease and Rowe teach the invention substantially as described above, including respective teachings of the use of databases to store relevant gaming data. For instance, Pease suggests an embodiment that additionally employs "dial-up database services and the like or permanent-node internet communications or database service communications" (10:23-35). Furthermore, Rowe teaches that after a ticket voucher is cashed out, "the CVT marks the ticket paid in a database to prevent a ticket voucher with similar information from being cashed multiple times" (2:31-34). While both references teach the use of 'databases', neither is specifically termed a 'relational database.' In a related disclosure, "What are relational databases?" teaches that relational databases have been "a staple of business computing from the very beginning of the digital era," noting E.F. Codd is credited with the creation of relational databases in 1970 (p. 1). The document teaches that the difference between tab-delimited, or "flat", databases and relational databases is simply one of tabulation: While the flat database creates "one long text file," the relational database uses tables to store information. Finally, the document recognizes that relational databases are beneficial in that they use "the relationship of similar data to increase the speed and versatility of the database" (p. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention taught by Pease and Rowe to utilize relational databases in order to increase

speed and versatility of databases, as is favorably taught by "What are relational databases?".

The combined teachings of Pease, Rowe, and "What are relational databases?" demonstrate the invention substantially as described above, but lack in explicitly teaching that obtained data (meter data, jackpot data, output ticket data, and player data) is not in a format useable by the accounting module software, and that the poller function is arranged to format the obtained data in a format useable by the accounting module software. The Examiner notes that these features are inherent in Pease, as evidenced by the teachings of "TCP/IP for Dummies" (hereinafter "TCP").

Pease teaches that the gateway processor 138 collects the relevant data from casino systems (including gaming machines) in casino 102 over a network and stores that data in a data base. Pease demonstrates that the type of network may be selected from a wide range of network types, such as "local area networks, wide are networks, client server or peer-to-peer networks, dial-up computer services such as dial-up internet services, dial-up database services and the like or permanent-node internet communications or database service communications" (10:25-35). *TCP* illustrates that the concept of protocol stacks is present in computer networking. While *TCP* focuses on two specific models, the OSI model and the TCP/IP model, the rejection does not rely particularly on either. Instead, the general concept of protocol stacking shows at the bottom level the physical layer, which deals exclusively with hardware such as the network interface (TCP 52). Additionally, the data link layer deals with packetizing of data sent across a connection medium, such as Ethernet or token ring. At the top end

of the stack exist the session, presentation, and application layers (TCP/IP aggregates all of these into the application layer), which provides file formatting at presentation layer (TCP 53).

*TCP* states, "When you send a message to another computer on the network, your information starts at the top layer of your computer, travels down all the layers to the bottom of the stack, and jumps across to the other computer," and "when your information gets to the other computer, it starts at the bottom layer and moves up the stack to the application in the top layer" (TCP 51). Therefore, in sending data over any network in Pease, data is necessarily in a format that is not useable by accounting module software because that software exists at the upper application layer, while the raw data transmitted over the network exists at the lower physical layer. Thus, in receiving the relevant data, Pease's gateway processor 138 obtains data in a format not useable by the accounting module software, and converts that information into a format that is useable by accounting module software. *TCP* shows that the data formatting processes are handled by the relevant layers of the stack and their associated computer hardware and/or software, and therefore the process does not require human intervention.

Further regarding claim 34, Pease teaches the recited dividing of gaming machines into a first group and a second group at least by the teaching that multiple casinos, each having a group of gaming machines, may communicate in substantially the same way with a respective gateway processor (see at least 1:65-2:19).

Regarding claim 2, Pease teaches a first network between the gaming machines and the second database, and a second network between the second database and the first database (see at least Fig. 1).

Regarding claim 3, Pease teaches a first processor arranged to manage the first database and a second processor arranged to manage the second database (see at least 5:40-41 and 5:61-66).

Regarding claims 5 and 23, Pease teaches wherein the data mover function is further configured to retrieve from the first relational database at least one of output ticket data, player data, jackpot data and meter data generated by the gaming machines within a predetermined preceding time period (see at least 5:56-60, 6:24-7:2, 8:13-18).

#### ***Response to Arguments***

5. Applicant's arguments filed 6/15/2010 have been fully considered but they are not persuasive.

Applicant contends that Pease teaches polling only in relation to the use of polling for communications between the central computer system 106 and the gateway processor 138, and Pease Does not show the claimed poller function "configured to poll each of the gaming machines." Applicant additionally argues that the player tracking teachings of Pease fails to show the claimed poller function and data mover function. The Examiner respectfully disagrees.

While it is clear that the polling may relate to communications between the central computer system 106 and the gateway processor 138, this is not to the exclusion of polling the gaming machines, such as slot machines 108a-108c. As is

evident from at least Figure 1 of Pease, gateway processor 138 receives data from the gaming machines over a token ring connection 144 (see also 5:44-47). Token ring networks are polling networks by definition, as each device receives a "token" (hence the name) that allows it to being transmission during that poll cycle. Further information about the token ring protocol may be found in U.S. 2002/0073019 to Deaton. For at least this reason, the gateway processor meets the limitation of a poller function as claimed. Moreover, Pease teaches that an active player may be identified at a gaming machine if there is a card inserted in the player tracker system at the time of the polling cycle, which is established by the central computer system (see at least 5:61-6:45). Because the central computer system contacts the gaming devices and obtains this and other information *through* the gateway processor, it is clear that the gateway processor polls the gaming devices in response to a received poll from the central system. For this additional reason, Applicant's argument is not persuasive.

Applicant's arguments with respect to the formatting of data to be audited have been considered but are moot in view of the new grounds of rejection described above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. McCulloch whose telephone number is (571) 272-2818. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. H. M./  
Examiner, Art Unit 3714  
9/8/2010

/Peter DungBa Vo/  
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